Application No.: 10/808,694 Docket No.: LOREAL 3.0-019

IN THE CLAIMS

1. (currently amended) A method of complexing metal cations present in either an oxidizing composition for bleaching, dying or permanently reshaping keratin fibres, or keratin fibres, wherein said oxidizing composition comprises at least one oxidizing agent, comprising the step of:

mixing said oxidizing composition with at least one compound of formula (I):

 $R-N-(CH(R')CO_2X)_2$ (I)

wherein:

R is a hydrogen atom or a CH(CO_2X)- $(CH_2)_2CO_2X$, CH(CH_3)- CO_2X or $(CH_2)_2-N$ (COR")- CH_2-CO_2X group;

R" is a linear or branched alkyl group containing from 1 to 30 carbon atoms, or a cycloalkyl group containing from 3 to 30 carbon atoms;

R' is a CH_2CO_2X group when R is a hydrogen atom, or R' is a hydrogen atom when R is other than a hydrogen atom; and

X is a hydrogen atom or a monovalent or divalent cation derived from an alkali metal, an alkaline-earth metal, a transition metal, an organic amine or an ammonium cation.

- 2. (currently amended) The method of claim 1, wherein said monovalent or divalent cation is preferably—chosen from a monovalent alkali metal cation, a divalent alkaline—earth metal cation, a divalent transition metal cation or a monovalent cation derived from an organic amine or an ammonium cation.
- 3. (previously presented) The method of claim 1, wherein said divalent cation is chosen from an alkaline-earth metal or a transition metal cation.

4. (previously presented) The method of claim 1, wherein said oxidizing agent is hydrogen peroxide, an alkali metal bromate and persalt.

- 5. (currently amended) The method of claim 1, wherein said compound of formula (I) is methylglycinediacetic acid, N-lauroyl-N,N',N'-ethylenediamiaminetriacetic acid, iminodisuccinic acid, N,N-dicarboxymethyl-L-glutamic acid, or a corresponding salt thereof.
- 6. (previously presented) The method of claim 1, wherein said oxidizing agent is aqueous hydrogen peroxide solution and the compound of formula (I) is methylglycinediacetic acid, optionally in the form of salts.

7. (canceled)

- 8. (previously presented) The method of claim 1, wherein said composition further comprises a cationic or amphoteric conditioning polymer.
- 9. (previously presented) The method of claim 1, wherein said composition further comprises an amphiphilic polymer, which is nonionic, anionic or cationic, wherein said amphiphilic polymer comprises a hydrophobic chain.
- 10. (previously presented) The method of claim 1, wherein said composition further comprises a surfactant.
- 11. (currently amended) The method of claim 1, wherein said composition further comprises a rheology modifiers other than said amphiphilic polymer of claim 9.
- 12. (previously presented) The method of claim 1, wherein said composition further comprises an acidifying or basifying agent.

- 13. (previously presented) The method of claim 1, wherein said composition further comprises a solvent chosen from water or a mixture composed of water and a cosmetically acceptable organic solvent.
- 14. (previously presented) The method of claim 1, wherein said composition further comprises an adjuvant chosen from a mineral or organic filler, a binder, a lubricant, an antifoam, a silicone, a dye, a matting agent, a preserving agent or a fragrance.
- 15. (currently amended) An oxidizing composition for dyeing, bleaching or permanently reshaping keratin fibres, comprising:
 - a) at least one oxidizing agent, and
 - b) at least one compound of formula (I):

 $R-N-(CH(R')CO_2X)_2$ (I)

wherein:

- R is a hydrogen atom or a $CH(CO_2X) (CH_2)_2CO_2X$, $CH(CH_3) CO_2X$ or $(CH_2)_2 N(COR'') CH_2 CO_2X$ group;
- R" is a linear or branched alkyl group containing from 1 to 30 carbon atoms, or a cycloalkyl group containing from 3 to 30 carbon atoms;
- R' is a CH_2CO_2X group when R a hydrogen atom, or a hydrogen atom when R is other than a hydrogen atom; and
- X is a hydrogen atom or a monovalent or divalent cation <u>chosen derived</u> from an alkali metal, an alkaline-earth metal, a transition metal, an organic amine or an ammonium cation;

with the proviso that,

when said oxidizing agent is sodium perborate, said compound of formula (I) is other than methylglycinediacetic acid or iminodisuccinic acid.

- 16. (previously presented) The composition of claim 15, wherein said monovalent cation is an alkali metal cation.
- 17. (previously presented) The composition of claim 15, wherein said divalent cation is an alkaline-earth metal or a transition metal cation.
- 18. (previously presented) The composition of claim 15, wherein said oxidizing agent is hydrogen peroxide, alkali metal bromate or persalt.
- 19. (previously presented) The composition of claim 18, wherein said oxidizing agent is persulphate.
- 20. (currently amended) The composition of claim 15, wherein said compound of formula (I) is methylglycinediacetic acid, N-lauroyl-N,N',N'-ethylenediamiaminetriacetic acid, N,N-dicarboxymethyl-L-glutamic acid—or iminodisuccinic acid, or a salt thereof.
- 21. (previously presented) The composition of claim 15, wherein said oxidizing agent is aqueous hydrogen peroxide solution and said compound of formula (I) is methylglycinediacetic acid or a salt thereof.
- 22. (previously presented) The composition of claim 15, further comprising at least one compound selected from the group consisting of:
 - a) a cationic or amphoteric conditioning polymer,
- b) an amphiphilic polymer which is nonionic, anionic, cationic, or amphoteric, wherein said amphiphilic polymer comprises a hydrophobic chain,
 - c) a surfactant,
- d) a rheology modifier other than the amphiphilic polymer of (b),

- e) an acidifying or basifying agent, and
- f) a solvent.
- 23. (previously presented) The composition of claim 22, further comprising an adjuvant chosen from a mineral or organic filler, a binder, a lubricant, an antifoam, a silicone, a dye, a matting agent, a preserving agent or a fragrance.
- 24. (previously presented) A method of bleaching keratin fibres comprising the steps of:
- a) applying to said keratin fibres the oxidizing composition of claim 15;
- b) leaving said oxidizing composition on the keratin fibres for a sufficient time to obtain the desired bleaching;
- c) rinsing said keratin fibres to remove said oxidizing composition therefrom.
- 25. (previously presented) A method of dyeing keratin fibres comprising the steps of:
 - a) applying a dye composition to said keratin fibres;
- b) applying the oxidizing composition of claim 15 to develop the color;
- c) leaving said oxidizing composition on said keratin fibres for a sufficient time to obtain the desired coloration;
- d) rinsing said keratin fibres with water to remove said dye composition and said oxidizing composition therefrom.
- 26. (previously presented) A method of dyeing keratin fibres comprising the steps consisting of:
- a) mixing a dye composition and the oxidizing composition of claim 15 to create a mixture;
 - b) applying said mixture to said keratin fibres;
- c) leaving said mixture on said keratin fibres for a sufficient time to obtain the desired coloration;

- d) rinsing said keratin fibres with water to remove said mixture therefrom.
- 27. (currently amended) A kit for dyeing keratin fibres comprising: at least two compositions A and B intended to be mixed together to obtain a ready-to-use dye composition, wherein
- a) said composition A is an oxidizing composition comprising at least one compound of formula (I):

 $R-N-(CH(R')CO_2X)_2 \qquad (I)$

wherein:

- R is a hydrogen atom or a $CH(CO_2X) (CH_2)_2CO_2X$, $CH(CH_3) CO_2X$ or $(CH_2)_2 N(COR") CH_2 CO_2X$ group;
- R" is a linear or branched alkyl group containing from 1 to 30 carbon atoms, or a cycloalkyl group containing from 3 to 30 carbon atoms;
- R' is a CH_2CO_2X group when R is a hydrogen atom, er a hydrogen atom when R is other than a hydrogen atom; and
- X is a hydrogen atom or a monovalent or divalent cation chosen from an alkali metal, an alkaline-earth metal, a transition metal, an organic amine or an ammonium cation;

with the proviso that,

when said oxidizing agent is sodium perborate, the compound of formula (I) is other than methylglycinediacetic acid or iminodisuccinic acid, and

- b) said composition B is a composition comprising at least one dye.
- 28. (currently amended) A kit for bleaching keratin fibres comprising: at least two compositions C and D intended to be mixed together to obtain a ready-to-use oxidizing composition, wherein

- at least one of the compositions C and D contains at least one oxidizing agent, and
- at least one of said compositions C and D contains at least one compound of formula (I):

$$R-N-(CH(R')CO_2X)_2$$
 (I)

wherein:

- R is a hydrogen atom or a CH(CO₂X) (CH₂)₂CO₂X, $CH(CH_3)-CO_2X$ or $(CH_2)_2-N(COR")-CH_2-CO_2X$ group;
- R" is a linear or branched alkyl group containing from 1 to 30 carbon atoms, or a cycloalkyl group containing from 3 to 30 carbon atoms;
- R' is a-CH₂CO₂X group when R is a hydrogen atom, or a hydrogen atom when R is other than a hydrogen atom; and
- X is a hydrogen atom or a monovalent or divalent cation chosen derived from an alkali metal, an alkaline-earth metal, a transition metal, an organic amine or an ammonium cation;

with the proviso that,

when said oxidizing agent is sodium perborate, said compound of formula (I) is other than methylglycinediacetic acid or iminodisuccinic acid.

kit for permanently (currently amended) A 29. reshaping keratin fibres, comprising at least two compositions E and F, wherein said composition E is an oxidizing composition and said composition F is a reducing composition, wherein said composition E contains at least one oxidizing agent and at least one compound of formula (I):

$$R-N-(CH(R')CO_2X)_2$$
 (I)

wherein:

R is a hydrogen—atom or—a $CH(CO_2X) - (CH_2)_2CO_2X$, $CH(CH_3)-CO_2X$ or $(CH_2)_2-N(COR'')-CH_2-CO_2X$ group;

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• R" is a linear or branched alkyl group containing from 1 to 30 carbon atoms, or a cycloalkyl group containing from 3 to 30 carbon atoms;

- R' is a CH₂CO₂X group when R is a hydrogen atom, or a hydrogen atom when R is other than a hydrogen atom; and
- X is a hydrogen atom or a monovalent or divalent cation chosen from an alkali metal, an alkaline-earth metal, a transition metal, an organic amine or an ammonium cation;

with the proviso that, when said oxidizing agent is sodium perborate, said compound of formula (I) is other than methylglycinediacetic acid-or-iminodisuccinic acid.

30. (canceled)

- 31. (previously presented) The composition of claim 15, further comprising a cationic or amphoteric conditioning polymer.
- 32. (previously presented) The composition of claim 31, wherein said cationic or amphoteric conditioning polymer is present in an amount of from 0.01% to 10% by weight relative to the total weight of said composition.
- 33. (previously presented) The composition of claim 32, wherein said cationic or amphoteric conditioning polymer is present in an amount of from 0.05% to 5% by weight relative to the total weight of said composition.
- 34. (previously presented) The composition of claim 15, further comprising an amphiphilic polymer which is nonionic, anionic, cationic, or amphoteric, wherein said amphiphilic polymer contains a hydrophobic chain.
- 35. (previously presented) The composition of claim 34, wherein said amphiphilic polymer is present in an amount of

from 0.05% to 20% by weight relative to the total weight of said composition.

- 36. (previously presented) The composition of claim 35, wherein said amphiphilic polymer is present in an amount of from 0.1% to 10% by weight relative to the total weight of said composition.
- 37. (previously presented) The composition of claim 15, further comprising a surfactant.
- 38. (previously presented) The composition of claim 37, wherein said surfactant is present in an amount of from 0.01% to 40% by weight relative to the total weight of said composition.
- 39. (previously presented) The composition of claim 19, wherein said surfactant is present in an amount of from 0.1% to 30% by weight relative to the total weight of said composition.
- 40. (previously presented) The composition of claim 15, further comprising a rheology modifier.
- 41. (previously presented) The composition of claim 40, wherein said rheology modifier is present in an amount of from 0.05% to 20% by weight relative to the total weight of said composition.
- 42. (previously presented) The composition of claim 41, wherein said rheology modifier is present in an amount of from 0.01% to 30% by weight relative to the total weight of said composition.
- 43. (previously presented) The composition of claim 15, further comprising a solvent.

- 44. (previously presented) The composition of claim 43, wherein said solvent is water or a mixture composed of water and a cosmetically acceptable organic solvent.
- 45. (previously presented) The composition of claim 43, wherein said solvent is present in an amount from 0.5% to 20% by weight relative to the total weight of said composition.
- 46. (previously presented) The composition of claim 45, wherein said solvent is present in an amount of from 2% to 10% by weight relative to the total weight of said composition.
- 47. (previously presented) The composition of claim 15, further comprising an adjuvant chosen from a mineral or organic filler, a binder, a lubricant, an antifoam, a silicone, a dye, a matting agent, a preserving agent or a fragrance.
- 48. (previously presented) The method of 24, further comprising the step of washing said keratin fibres one or more time, rinsing said keratin fibres after each wash.
- 49. (previously presented) The method of 48, further comprising the step of drying said keratin fibres.
- 50. (previously presented) A method of permanently reshaping keratin fibres, comprising the step of:

applying to said keratin fibres a reducing composition;

leaving said reducing composition on said keratin fibres for a sufficient time to obtain the desired reshaping;

rinsing said keratin fibres to remove said reducing composition therefrom;

applying the oxidizing composition of claim 15 to said keratin fibres;

leaving said oxidizing composition on said keratin fibres for a sufficient time to obtain the desired reshaping;

rinsing said keratin fibres with water to remove said oxidizing composition therefrom;

washing said keratin fibres one or more times, rinsing them after each wash.

- 51. (previously presented) The method of claim 50, further comprising the step of drying said keratin fibres.
- 52. (previously presented) The method of claim 8, wherein said cationic or amphoteric conditioning polymer is present in an amount from 0.01% to 10% by weight relative to the total weight of said composition.
- 53. (previously presented) The method of claim 52, wherein said cationic or amphoteric conditioning polymer is present in an amount from 0.05% to 5% by weight relative to the total weight of said composition.
- 54. (previously presented) The method of claim 9, wherein said amphiphilic polymer is present in an amount from 0.05% to 20% by weight relative to the total weight of said composition.
- 55. (previously presented) The method of claim 54, wherein said amphiphilic polymer is present in an amount from 0.1% to 10% by weight relative to the total weight of said composition.
- 56. (previously presented) The method of claim 10, wherein said surfactant is present in an amount from 0.01% to 40% by weight relative to the total weight of said composition.

57. (previously presented) The method of claim 56, wherein said surfactant is present in an amount from 0.1% to 30% by weight relative to the total weight of said composition.

- 58. (previously presented) The method of claim 11, wherein said surfactant is present in an amount from 0.05% to 20% by weight relative to the total weight of said composition.
- 59. (previously presented) The method of claim 58, wherein said surfactant is present in an amount from 0.1% to 10% by weight relative to the total weight of said composition.
- 60. (previously presented) The method of claim 12, wherein said acidifying or basifying agent is present in an amount from 0.01% to 30% by weight relative to the total weight of said composition.
- 61. (previously presented) The method of claim 13, wherein said solvent is present in an amount from 0.5% to 20% by weight relative to the total weight of said composition.
- 62. (previously presented) The method of claim 61, wherein said solvent is present in an amount from 2% to 10% by weight relative to the total weight of said composition.
- 63. (previously presented) The method of claim 1, further comprising a step of applying said oxidizing composition to said keratin fibres.